DOCUMENT RESUME

ED 041 429 EC 006 108

AUTHOR	Connelly, Winnifred
TITLE	Visually Handicapped Children -- Birth to Three Years.
INSTITUTION	Michigan Univ., Ann Arbor. Medical Center.
PUB DATE	Dec 69
NOTE	10p.
EDRS PRICE	EDRS Price MF-$0.25 HC-$0.60
DESCRIPTORS	Blind, *Child Development, *Early Childhood, *Exceptional Child Education, Infants, Learning Activities, Parent Child Relationship, *Visually Handicapped

ABSTRACT

The early development of visually handicapped children, from birth to age 3, is discussed. The mother's role following diagnosis is stressed, with attention to providing love, and an environment for learning, manipulative and motor activities, and nutrition. (JD)

ED041429

Visually Handicapped Children, Birth to Three Years

By Winnifred Connelly, MPH
Child Development Project
University of Michigan Medical Center
Ann Arbor, Michigan

December 13, 1969

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

EC006108

All of us present are interested in visually handicapped children and feel friendship for them. Our work, in Selma Fraiberg's educational program for blind infants in Ann Arbor, has concentrated on infants blind from birth. The children cannot call on any previous visual experience. There are a fortunate few who have light perception. Others may gain vision as a new sense, for instance, after cataract operations, which are being done earlier in the first year when possible. For those who do have light perception, or even color perception without form, the world out there becomes real in another way and they have an advantage which shows up in differentiation of self and others, and dramatically shows itself in such activities as doll play.

I can feel the tugging of Joan's small hand. Joan was born with congenital glaucoma. At two years, she will take my hand and lead me where she wants to go. One day she led me into her mother's room to look at the large mirror. In it she can see reflected light and color and movement but no form. She likes to sit or stand in front of the mirror and wanted to share the game with me. Sometimes she will play with her shadow on the wall.

When she came to the clinic to see the eye doctor she could be quieted by being given a hand mirror. She holds it close to her face. The doctor quickly made an adaptation of looking over her shoulder and when he flashed his small light she saw it in the mirror, smiled and, understanding the reality causing the reflection, she turned to look at the light itself. The doctor's efforts now will be at saving what light perception she has. It is a wise doctor who adapts his exam to keep from startling a blind child. The pace can be slowed down.

Our work is aimed at developing the child's own abilities and autonomy in the real world. It is started as young as possible. The basic foundation is the relationship between infant and mother. This may be strained at first if a premature baby is not used to handling and if the mother is naturally depressed by having a blind child. She may be normal in every other way. For the purpose of this discussion we will focus on the one handicap rather than multiple disabilities.

The time for referral and support, guidance and demonstration for the parents of a blind infant is at the time the diagnosis is made. In other words, the earliest possible moment. If congenital glaucoma or some other conditions can be diagnosed at the time of birth that is the time to support the parents, for even at a time of shock and despair there is much that can be done for which the parents are very grateful. Occasionally, the blindness is not recognized till four months or even later. If a

mother in that situation becomes severely depressed this requires skillful handling and referral for treatment.

Parents may ask "How will the baby know me?" The intuitive mother will cuddle and hold her baby in the same way that she would a sighted child. For the totally blind child this is even more important. He will learn to know his mother by touch, voice and the kinesthetic sensations of handling during daily activities. But, as Selma Fraiberg says, "If there is tactile auditory insufficiency in the first months, it will prevent the blind baby from making the vital attachments to his mother and to the human world." Unfortunately we sometimes see children for the first time when they are already over a year in age. Occasionally there will be a difficult social situation in which a child has not received his mother's love. One little boy we call Jerry was neglected by his mother. He was then cared for by an aunt who took good care of him. But his mother regained custody and the series of changes has been too much for him and he appears to be disturbed. Even when a mother wants to give good care, if she does not have professional help or guidance during the first year, time is lost that is very hard to make up. If we could only give one year of service and had to choose between the first or third year we would emphasize the first.

As reported in the recent article in the Journal of Special Education (1) "No educational strategies can succeed if the baby has not found meaning in his world through affectional ties to his parents. No toy will have value if the human figures in the baby's environment are not valued. No device will give meaning to sound if the human voice has not united sound with the totality of tactile intimacy, comfort and pleasure that can only be provided by a human partner." Parents will be rewarded by the infant's smiling to their voices and touch, so the language of smiling is not absent; it is learned through other cues. Of all the things that we have done to aid the early development of blind babies we place greatest value on our work in promoting the love bonds between the baby and his parents. Given this basic premise the blind infant can develop satisfactorily. The blindness need not handicap him in other senses. The other perceptions are not more sensitive to start with, hearing and touch for instance, but because they are used without sight, there is more attention to sound and the apparent sensitivity develops. This will be if there is not confusion of other noises and if the child can cause sound in musical toys and rattles.

The other basic necessity for the infant is to be allowed to act in a voluntary

way upon his own world. Even feeding is not a passive experience. Anyone who has seen an infant rooting for the breast knows nature did not intend feeding to be a passive experience. Or we can see an infant reaching actively for the bottle and soon placing both hands on the bottle, or one on the person holding him in her arms. If a mother holds the baby's hand still during feeding, even lovingly, she is preventing him from the first voluntary gestures. Love can be expressed in holding, but not in preventing hand movement. When he can hold the bottle himself, still in his mother's arms, he has the satisfaction of participating in the feeding and knowing who is the human provider. This tie is necessary and continues on through finger feeding and to self feeding later. There is rarely any difficulty chewing if solid foods are presented at the time of teething to an infant who has learned to participate. Since feeding is central to the first year much learning takes place around it.

When we look at toys for any age from the first four months on to age three years, there is a point of view from which to work. Freedom to explore the safe toy is a doorway to creativity that "learning the right way" cannot provide. For the developing infant there is no "right way." There are areas in life where this comes, much later, and always subject to change and adaptation. A previous head of World Health Organization has said that today a child needs ability to adapt to change to a degree never known before. Our world is changing so rapidly. For the blind child a wise balance exists between finding things in a familiar place and finding new opportunities. The toy with an attractive sound is indispensible to the blind infant, but only if he can act upon it. As an early example, there is the cradle gym which makes a sound when a ring is pulled. It is an activator. The action blocks add much opportunity to investigate and cause a sound for the older child. Background noises of television and radio may please an infant but he cannot act upon them until he is motile. Creeping will come when the infant is motivated to reach toward a familiar sounding object that he has previously handled and enjoyed, and when he can identify approximately in space where the sound is coming from. For a long time the sound of a bell does not connote the object he just held. But by constant experience with that toy he will learn, at about 10 months, that the sound means that toy. It takes many weeks of learning to reach on sound cue and it must of course be built up on small successes, not countless frustrations. At the appropriate time the sound will cause him to reach for what we have not yet given him.

The baby who has all his wants supplied before he even knows he wants something does not learn his own ability to cause events. Even an autistic child may be said to "come to life" when he takes action on his own behalf. His attempts to cause mother to come, or to feed him, have meaning for an infant in a learning sense if the interval is very short between cry and the appearance of his mother or the bottle. If he has not had to ask for it at all he does not know he can cause anything. Food reaches his mouth by magic, not by his efforts. The sounding toy which he can locate provides him with the sense of object constancy which, once learned, can be tested in various ways by covers or barriers which may become more complicated.

We all have in mind many toys that we have used with blind children. The person who offers the toys to an infant is as important as the toy. The skill lies in interesting the mother to continue the interaction which may be demonstrated. This may mean giving much support to a mother who is not confident and whose vision of the future is clouded. There must also be opportunity for the baby to play when his mother is busy. Crib toys are needed, and the sounding cradle gym, which does not go away but is there when the baby raises his arms and hands. It gives him, not only much fun, but more information about his own actions as he learns to cause the sound. As soon as he can sit supported, we use a chair surrounded on three sides with a table surface, with a small rail that prevents objects from dropping over the edge, gives opportunity for manipulation of objects in a different plane. He reaches at midline and is certain to find toys there, on the table.

The gross motor milestones may come a little later for blind children but they will appear in order, if the child is given the opportunity. There is great pleasure for the blind child in dancing as we saw one girl doing just before her third birthday; it was rhythmical and free to a good nursery record. There is pleasure in singing along with the record too. Gross motor supersedes small manipulations when it has appeared and can be endlessly encouraged with benefit to later mobility. The child restricted from mobility has fewer outlets for energy and aggression and it may be turned inward.

As an example of this Jackie at 17 months had a severe set back. His mother was called away suddenly when her father died and was away several days. During that time Jackie was in the care of various friends and relatives who helped out in the emergency. When his mother returned she found Jackie had screaming fits which lasted for hours. There was brief consolation when his mother held him. She sought help

from Mrs. Fraiberg. From the observers she learned that it looked like helpless rage. She gave the suggestion that when Jackie started shouting his mother should provide him with pots and pans or banging toys and encourage him to pound them with his hands. Within a few days the mother phoned. The banging games had "worked like magic." The shouting had stopped and Jackie had taken to the pounding with an enthusiasm which surprised her. It created a noise but it was one she could tolerate. More than this, it provided adequate discharge of tension. He began to show signs of improvement, shouting was rare, clinging decreased and he was playing actively again. He used his pot banging only when he needed it. Later his mother gave him a toy punching bag he enjoys. He is a child who can fight back if necessary.

Unrealistic expectations of parents may be too high or too low. Both are frustrating. Each child is different. How is the mother, or her teacher to judge? The child will tell us, given the opportunity, in a permissive, tension free atmosphere. How do we know what is the appropriate toy? The burden is on the observer. A child may be rocking, out of boredom or loneliness. The rocking may cease when his attention is captured. It may drop out entirely, as we have seen, when mobility increases the range of the child's world. If the mothers or fathers time with the child is so important, they also are all different. With the intuitive mother a program of what might be called enrichment will enable her to do well. But what about the depressed mother of a handicapped child? Many, perhaps most parents, go through a period of depression when facing the knowledge that their child is blind. If professional help seems indicated, it is well to separate treatment for the adult from the encouragement to enjoy her child which will come as she feels better able to cope. Sometimes the opportunity to express her feelings in a non-judgmental atmosphere may be enough to allow her own strengths to emerge. Of course, the satisfaction of seeing the child's small gains in accomplishment will bring happiness, if it is understood. As long as a mother can care for her child, however, her place is right there with him.

In any case, a child cannot be treated successfully without the participation of his parents or foster parents. We do not place ourselves on opposite sides. Enlist their aid, welcome it and as they help it will help the child. If we can regard the parent as an asset, and as an extension of the program, we can assume that all are working toward the same goal.

In playing with a baby or pre-schooler, we always sit on the floor. This brings

us down to their height. Otherwise, their world is made up of legs of people and furniture, whether they can be felt or seen. The blind child appreciates this and will stand beside us, or sit there with a comfortable friendliness. Many so called lap games can be played on the floor while insuring more independence of movement to the blind child who can safely move around. A blind infant when placed prone on a blanket does not raise his head naturally because he does not have the stimulus of vision. If we are on the floor with him, stroking his head or just keeping in touch, he is more easily interested in a musical ball or toy that he can use both hands to play with when his head is raised. The musical ball rolls out of reach, but not far, and he will reach out, and this leads to creeping when he has matured to that point. Some blind children have the motor abilities but not the motivation for creeping.

Language makes its beginning in the first year, with cooing and then babbling in response to mother's voice. If we wait after speaking the baby will respond. He may initiate the conversation. If we speak with the infant in simple terms always naming the activities taking place, he will soon learn by our tone and later recognize the words. Language development follows the same general pattern of a sighted child but a little slower. There is not all the naming of objects that are seen that a sighted child asks for. With a warm relationship and conversation directed to the baby's pace and understanding they will soon imitate and experiment with sounds. If there is a continuous stream of conversation going over his head he will lose interest. All the hand games with nursery rhymes are interesting. One leads to naming eyes, nose, mouth and so on. Patty-cake is a perennial favorite, sung all the way through. Peek a boo can be played with touch.

If there seems a discouraging lack of progress in a child's interest and ability to manipulate toys and rattles there are many possible causes. Of course, we expect the child to be receiving medical care and periodic examinations. However, it is possible, even nowadays, for the child to be on an inadequate diet. The great lack may be protein. And we are not talking only of the economically deprived child. A so-called middle class mother may be stressing fruits and commercially prepared mixtures. The mixed meat and vegetable jars have less meat than we expect. To some extent, the baby, "eating from the table" has an advantage in that at least his family knows what he is eating. An increase in protein may soon produce an increase in body tone and vigor. A mother may be asked to keep a record for two days of what a child actually eats - not just what is offered.

We met two children who had been kept too long on strained food. They were low on protein and missed the best time to start chewing - when the teeth come in. There

is an institution in Guatemala called Incap where much important research is done on nutrition by Dr. Cravioto and others. The child with severe protein deficiency can be cured by diet. But if the malnutrition occurred too young there is permanent damage that can never be repaired and the child remains at a retarded level. Do we need to mention that a child may also overeat and become obese, which has its own dangers.

Some mothers are quick to say a child does not like a certain food and, of course, we all have pereferences. A food should never be forced. However, if a new food is re-introduced casually and frequently a child comes to know and like it. This applies to new textures too. We have all seen the expression of a child given a new taste. It is total rejection. They may reject solids, too, if used to smooth consistencies. The child with siblings is in an advantageous situation. If everyone else enjoys a food, he soon will, too. If a baby gags at the first experience of solid food, that may represent rejection. If physically normal, they will learn by experience to enjoy it. We get different reactions to hard teething cookies. Some mothers say they are tasteless. But if a child will bite down hard on a teething ring he will bite on a hard cookie.

Bringing toys to the mouth is natural to all children. For the blind child it may develop usefully. When Jackie age 3 was first given wooden spools on a string, he only took them off. The second time, and without any help, he learned to thread them on. He held the spool in one hand and the lacing in the other. He lightly touched the spool to his mouth and then accurately inserted the lacing. He threaded several spools in this way. The touch to the lips may be as quick and light as a glance will be from a sighted child, and provides similar information.

And so the mother provides the early learning. If she does not understand this, the infant may remain unstimulated in his crib for most of his day, and he may appear retarded. We stress his learning to know his mother by her holding him for feeding. Some children who are raised where breast feeding is still natural will have an advantage. Singing and lap games create conditions for a dialogue between mother and infant. This achieves the first guarantees of a blind baby's development. They learn to associate pleasure and satisfaction with her person, to unite feeding and physical intimacy. A premature infant, coming home after two months in the hospital, requires tactful, gradual introduction to holding. They may give the appearance that they don't want to be held, due to lack of experience.

If the hands are free to explore, opportunities must be given. A cradle gym across

the crib is much enjoyed. When he raises his hands in random gestures, he will contact it. Those incorporating sounds are most interesting to him. Any soft or stuffed toy is more interesting if there is a pleasant sound, one that does not require too early a skill in turning it on. It gives comfort too.

As soon as the child can sit supported, he needs experience in sitting. A blind infant of six months can get much learning from finding objects on a flat play table surface.

A playpen is essential. This provides a known space within which the baby can locate his toys, can roll over. At the time he is ready, it gives him a safe place to pull himself to sit and later pull himself to stand and cruise around the edge. He needs some time alone to amuse himself but much of his waking time is spent in company of parents or siblings. A child left alone too much is too inward turning. A balance is required. When he learns to walk the playpen is outgrown.

As a sighted child learns to use his hands he watches them. A blind child needs definite help in bringing the hands to midline. A ring on which both hands can be placed at one time helps. Also, of course, both hands can go to the bottle. The nursery game of patty-cake is helpful. It will lead to mutual fingering and then transferring and exploring shape, texture, moving parts of a variety of objects.

A dinner bell, with a wooden handle that can be chewed safely, has been found a very important tool of learning. Babies enjoy it and it can be used to initiate search on sound. At first, it will have to be touched to his hand. Later, at approximately ten months, he will reach out accurately to its position. This belief that the bell exists and he can reach it himself is a milestone. The baby who is rolling to prone and getting on all fours will creep to this bell when he is physically ready.

A blind toddler will walk around his house and learn his way. Then the playpen is no longer necessary. There is so much pleasure in walking for a toddler that he may temporarily lose interest in fine manipulations. He just wants to walk all the time. There are many large toys they can ride and enjoy while using the whole body. If taken outdoors every day, a toddler is not afraid of outdoors, and is safely accompanied on small adventures.

Imaginative doll play goes through various stages. The totally blind child is not interested early in doll play. Two children with light perception showed an interest in dolls around two years. Joan carries a doll happily. She will now brush her doll's

hair. Karen, who had a baby sister, calls her doll "Baby" and feeds her and puts her to bed. A totally blind girl, Cathy, did not seem interested. When asked if she wanted to give the doll a bath she stepped in the baby bath herself. There is difficulty in understanding miniatures. When Cathy was given a miniature Christmas tree she said, "Feels like brush." Karen has a real dog but when given a small toy dog she felt it all over and put it down, not much interested. When her sighted sister picked up the toy and said, "Doggie" Karen looked surprised. It is easier with some furniture, such as a chair, for a totally blind child to learn different sizes including the miniature. Nested cups may help. Joan is interested in shoes, her own, her doll's shoes and sometimes "dresses up" and wears her mother's shoes around the house.

Fear is not normally present if children have been allowed experiences under safe guidance. A blind child is very sensitive to the feelings of those around him. A mother may have to learn security herself in letting his progress. The child who is interested in a world that has been kind to him will seek new experiences.

If I may quote from Witter Bynner.

".....tho he lead them
He follows them
He imposes no weight on them
And they, in turn, because he does not impede them
Yield to him, content;
People do not tire of anyone who is not bent upon comparison."

(1) Fraiberg, Selma: Smith, Marguerite: Adelson, Edna "An Educational Program for Blind Infants" Journal of Special Education, Vol. 3, No. 2 Summer 1969.